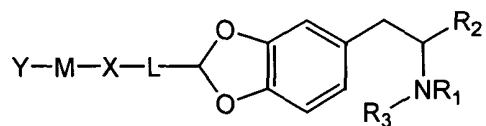


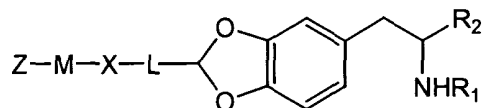
**What is claimed is:**

1. A compound having the structure



where L is CO or CH<sub>2</sub>, X is NH or O, M is a saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted, straight or branched chain of 0-10 carbon or hetero atoms, Y is an activated functionality selected from the group consisting of active esters, isocyanates, isothiocyanates, thiols, imidoesters, anhydrides, maleimides, thiolactones, diazonium groups, and aldehydes, and R<sub>1</sub> is H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, or C<sub>3</sub>H<sub>7</sub>, R<sub>2</sub> is CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>, and R<sub>3</sub> is a protecting group or H.

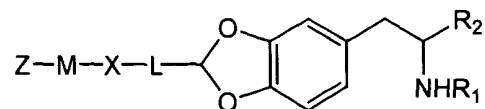
2. The compound of claim 1 wherein X is NH, Y is an activated ester, R<sub>1</sub> is CH<sub>3</sub>, R<sub>2</sub> is CH<sub>3</sub>, and R<sub>3</sub> is a protecting group. [MDMA activated hapten]
3. The compound of claim 1 wherein X is NH, Y is an activated ester, R<sub>1</sub> is C<sub>2</sub>H<sub>5</sub>, R<sub>2</sub> is CH<sub>3</sub>, and R<sub>3</sub> is a protecting group. [MDEA activated hapten]
4. The compound of claim 1 wherein X is NH, Y is an activated ester, R<sub>1</sub> is H, R<sub>2</sub> is CH<sub>3</sub>, and R<sub>3</sub> is a protecting group. [MDA activated hapten]
5. A compound having the structure



where L is CO or CH<sub>2</sub>, X is NH or O, M is a saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted, straight or branched chain of 0-10 carbon or hetero atoms, Z is a carrier molecule, R<sub>1</sub> is H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, or C<sub>3</sub>H<sub>7</sub>, and R<sub>2</sub> is CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>.

6. The compound of claim 5 wherein X is NH, Z is selected from the group consisting of KLH, BSA, and aminodextran, R<sub>1</sub> is H, CH<sub>3</sub>, or C<sub>2</sub>H<sub>5</sub>, and R<sub>2</sub> is CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>.
7. Cell line MDMA 8.3, ATCC designation \_\_\_\_\_, producing a monoclonal antibody having greater than 100% cross-reactivity to MDEA.
8. A monoclonal antibody produced from cell line MDMA 8.3, ATCC designation \_\_\_\_\_, the antibody having greater than 100% cross-reactivity to MDEA.
9. A monoclonal antibody having greater than 100% cross-reactivity to MDEA and binding in a manner equivalent to that of an antibody from cell line MDMA 8.3, ATCC designation \_\_\_\_\_.
10. Cell line MDMA 6.1, ATCC designation \_\_\_\_\_, producing a monoclonal antibody having greater than 90% cross-reactivity to MBDB and *d*-MAMP.
11. A monoclonal antibody produced from cell line MDMA 6.1, ATCC designation \_\_\_\_\_, the antibody having greater than 90% cross-reactivity to MBDB and *d*-MAMP.
12. A monoclonal antibody having greater than 90% cross-reactivity to MBDB and *d*-MAMP and binding in a manner equivalent to that of an antibody from cell line MDMA 6.1, ATCC designation \_\_\_\_\_.
13. Cell line MDEA 2.2, ATCC designation \_\_\_\_\_, producing a monoclonal antibody having greater than 100% cross-reactivity to MDMA and MDBD.
14. A monoclonal antibody produced from cell line MDEA 2.2, ATCC designation \_\_\_\_\_, the antibody having greater than 100% cross-reactivity to MDMA and MBDB.
15. A monoclonal antibody having greater than 100% cross-reactivity to MDMA and MDBD and binding in a manner equivalent to that of an antibody from cell line MDEA 2.2, ATCC designation \_\_\_\_\_.

16. An antibody generated in response to a compound having the structure



where L is CO or CH<sub>2</sub>, X is NH or O, M is a saturated or unsaturated, aliphatic or aromatic, substituted or unsubstituted, straight or branched chain of 0-10 carbon or hetero atoms, Z is a carrier molecule selected from the group consisting of proteins, polypeptides, and polysaccharides, R<sub>1</sub> is H, CH<sub>3</sub>, C<sub>2</sub>H<sub>5</sub>, or C<sub>3</sub>H<sub>7</sub>, and R<sub>2</sub> is CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>.

17. The antibody of claim 16 wherein L is CH<sub>2</sub>, X is NH, M is OC(CH<sub>2</sub>)<sub>2</sub>CO, Z is KLH, R<sub>1</sub> is CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>, and R<sub>2</sub> is CH<sub>3</sub>. [This covers immunogens **1P** (R<sub>1</sub>=CH<sub>3</sub>) and **2U** (R<sub>1</sub>=C<sub>2</sub>H<sub>5</sub>), which gave rise to the claimed mabs.]